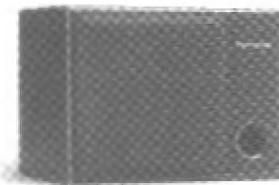




# Panasonic®

## Active subwoofer system SB-AS35

### Operating Instructions



Before connecting, operating or adjusting this product, please read these instructions completely. Please save this manual.

### *Dear customer*

Thank you for purchasing this product.  
For optimum performance and safety, please read these instructions carefully.

## Supplied accessories

Speaker feet (4 pcs.) (RKA0061-K1)      Stereo connection cable (1 pc.) (RJJL2P002B30)



Use numbers indicated in parentheses when asking for replacement parts.

(Only for U.S.A.)

To order accessories call MSC Accessory Dept. 1-800-332-5368.

The model number and serial number of this product can be found on either the back or the bottom of the unit. Please note them in the space provided below and retain them for future reference.

MODEL NUMBER SB-AS35  
SERIAL NUMBER \_\_\_\_\_

### User memo:

DATE OF PURCHASE \_\_\_\_\_  
DEALER NAME \_\_\_\_\_  
DEALER ADDRESS \_\_\_\_\_  
TELEPHONE NUMBER \_\_\_\_\_

### WARNING:

TO REDUCE THE RISK OF FIRE OR  
ELECTRIC SHOCK, DO NOT EXPOSE THIS  
APPLIANCE TO RAIN OR MOISTURE.

### CAUTION:

TO PREVENT ELECTRIC SHOCK MATCH  
WIDE BLADE OF PLUG TO WIDE SLOT,  
FULLY INSERT.



**CAUTION**

RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF  
ELECTRIC SHOCK, DO NOT  
REMOVE SCREWS.  
NO USER-SERVICEABLE  
PARTS INSIDE.  
REFER SERVICING TO QUALIFIED  
SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

# Precautions

Before using this unit please read these operating instructions carefully. Take special care to follow the warnings indicated on the unit itself as well as the safety suggestions listed below. Afterwards keep them handy for future reference.

## Safety

1. **Power Source**—The unit should be connected to power supply only of the type described in the operating instructions or as marked on the unit.
2. **Polarization**—If the unit is equipped with a polarized AC power plug (a plug having one blade wider than the other), that plug will fit into the AC outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
3. **Power Cord Protection**—AC power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Never take hold of the plug or cord if your hand is wet, and always grasp the plug body when connecting or disconnecting it.
4. **Nonuse Periods**—When the unit is not used, turn the power off. When left unused for a long period of time, the unit should be unplugged from the household AC outlet.

## Installation

### Environment

1. **Water and Moisture**—Do not use this unit near water—for example, near a bathtub, washbowl, swimming pool, or the like. Damp basements should also be avoided.
2. **Heat**—The unit should be situated away from heat sources such as radiators and the like. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).

### Placement

1. **Ventilation**—The unit should be situated so that its location or position does not interfere with its proper ventilation. Allow 10 cm (4") clearance from the rear of the unit.
2. **Foreign Material**—Care should be taken so that objects do not fall into and liquids are not spilled into the unit. Do not subject this unit to excessive smoke, dust, mechanical vibration, or shock.
3. **Magnetism**—The unit should be situated away from equipment or devices that generate strong magnetic fields.
4. **Stacking**—Do not place heavy objects, other than system components, on top of the unit.
5. **Surface**—Place the unit on a flat, level surface.
6. **Carts and Stands**—The unit should be used only with a cart or stand that is recommended by the manufacturer. The unit and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit and cart combination to overturn.
7. **Wall or Ceiling Mounting**—The unit should not be mounted to a wall or ceiling, unless specified in this operating instructions.



## Maintenance

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution.

Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene.

## Service

1. **Damage Requiring Service**—The unit should be serviced by qualified service personnel when:
  - (a) The AC power supply cord or the plug has been damaged; or
  - (b) Objects have fallen or liquid has been spilled into the unit; or
  - (c) The unit has been exposed to rain; or
  - (d) The unit does not appear to operate normally or exhibits a marked change in performance; or
  - (e) The unit has been dropped, or the enclosure damaged.
2. **Servicing**—The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to an authorized service personnel.  
(Only for U.S.A.)  
Call 1-800-545-2672 for the address of an authorized factory servicenter.

## Listening caution



Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion—and, most importantly, without affecting your sensitive hearing.

We recommend you to avoid prolonged exposure to excessive noise.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing.

Guard against this by setting your equipment at a safe level **BEFORE** your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.

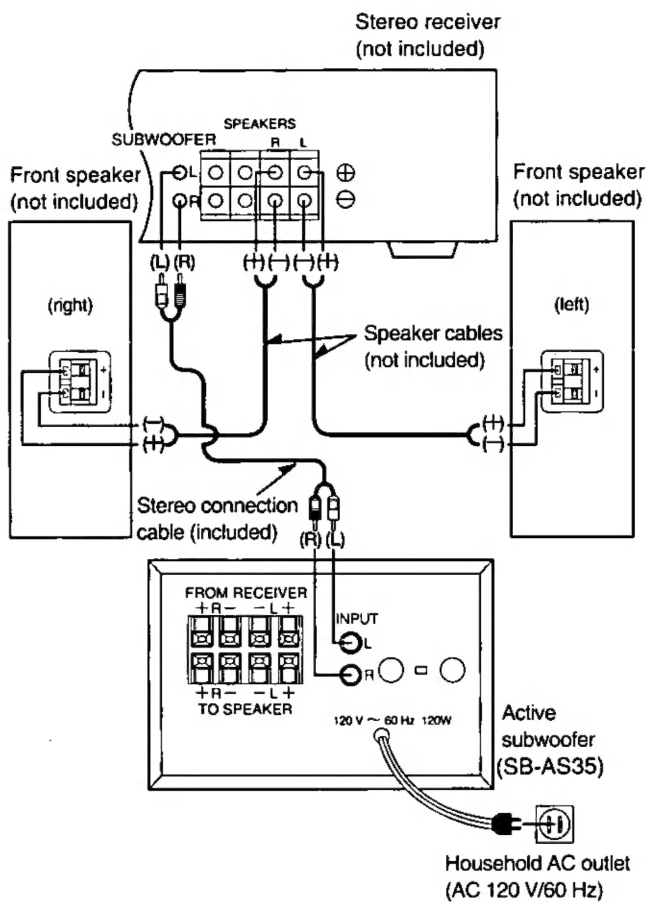
Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

# Connections

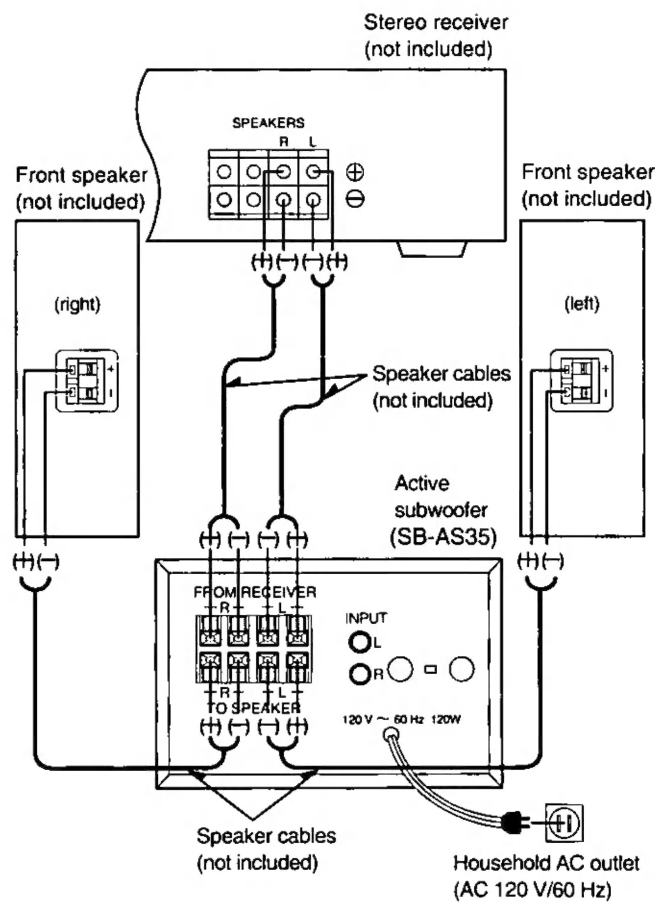
## Notes

- Before making the connections, switch OFF the power to this unit and the receiver.
- Use with a receiver having 8Ω or below impedance speaker terminals.
- Be sure to connect only positive (+) wires to positive (+) terminals, and negative (–) wire to negative (–) terminals.

## When connecting to a receiver with subwoofer terminals



## When connecting to a receiver without subwoofer terminals

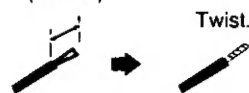


## When connecting to a receiver with only one subwoofer terminal

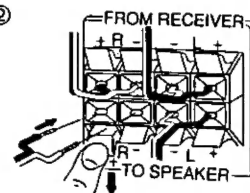
You can connect either the L or R plug from your stereo cable to the terminal.

## Connecting of speaker cables

① 15 mm (19/32")



②

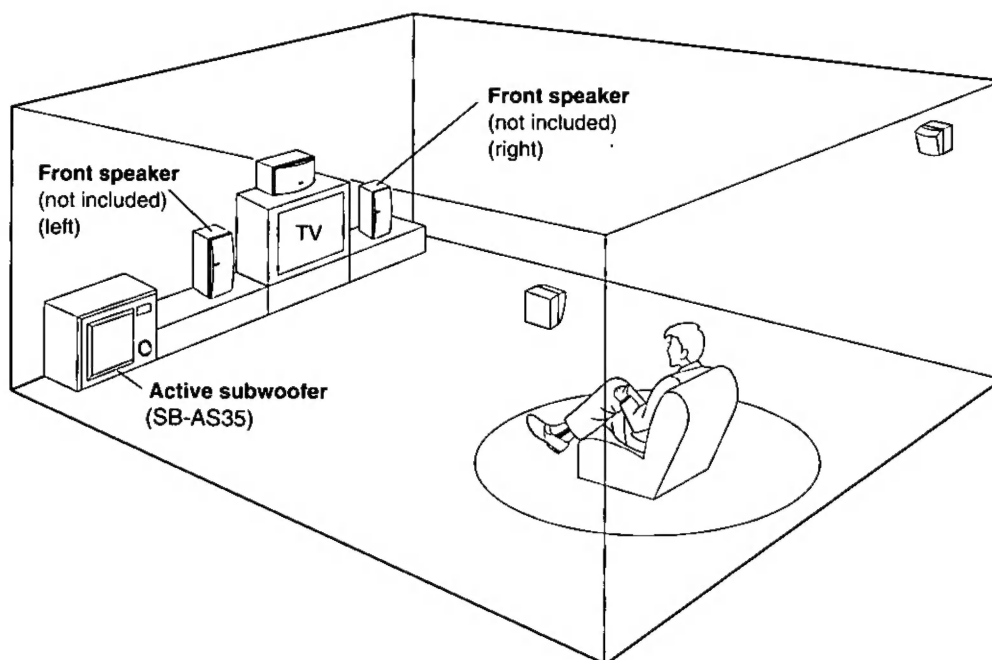


### Note

To prevent damage to circuitry, never short-circuit positive (+) and negative (–) speaker wires.

# Positioning the Speakers

The diagram below shows the basic positioning of each speaker.



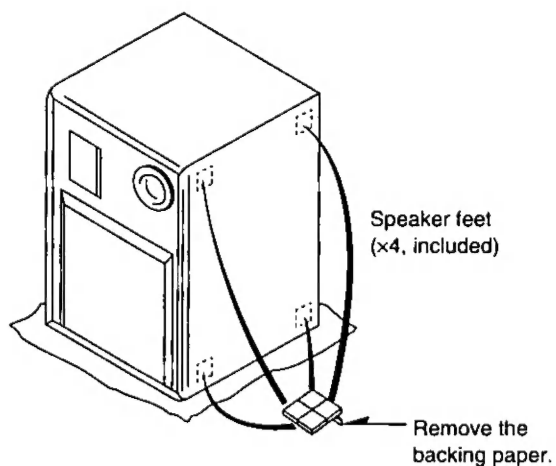
## Attaching speaker feet

Loud volumes from the speakers may cause them move on some floors. In such cases, attach the accessory speaker feet as shown in the illustration below.

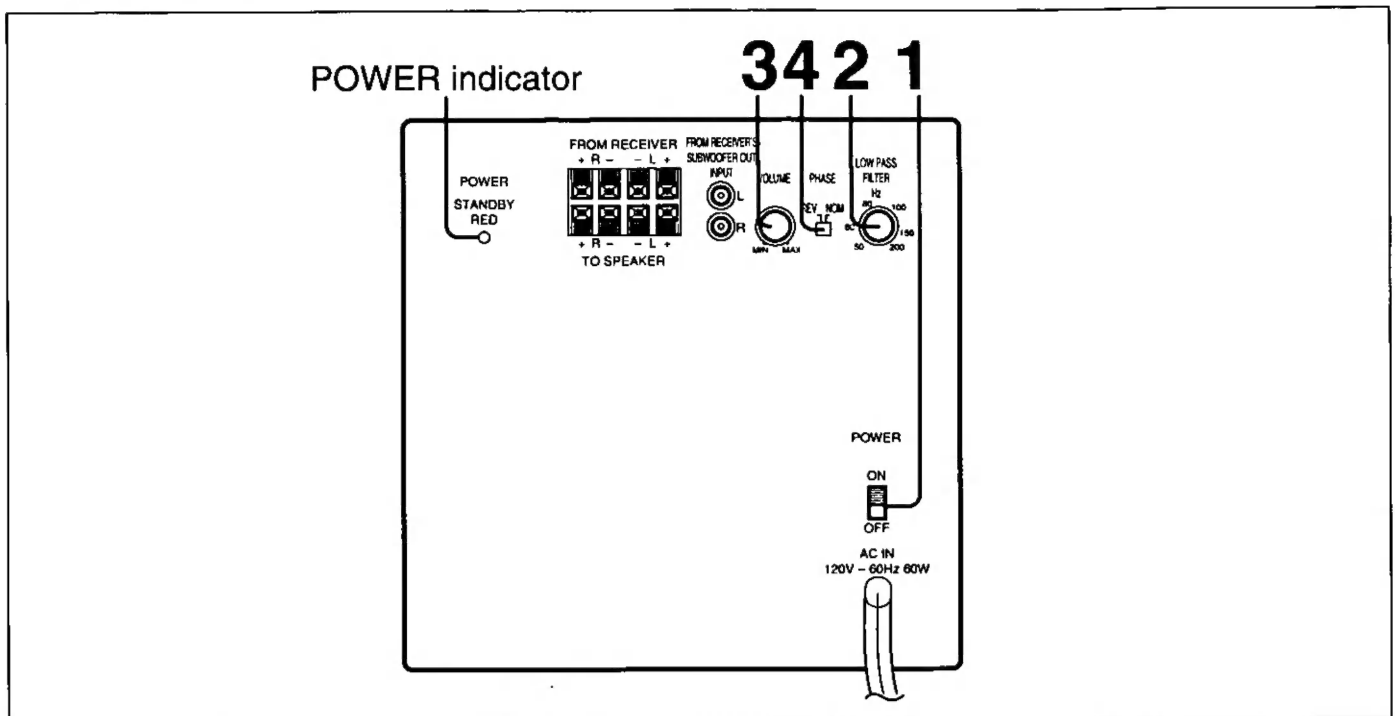
(To prevent damage to the speakers, lay them on top of a soft cloth before attaching the speaker feet.)

## Note when positioning

- The subwoofer can be placed in any position as long as it is at a reasonable distance from the TV.
- Do not place any object on top of this unit.
- Be sure to lay the subwoofer to its longer side as shown in the picture.



# Operation



Set the low pass filter, volume and phase to suit characteristics of the front speaker and SB-AS35 combination.

- 1 Set POWER to the "ON" position.**  
(The POWER indicator will light up green.)
- 2 Set LOW PASS FILTER to a suitable frequency, referring to the frequency response by LOW PASS FILTER setting on the right.**
- 3 Set VOLUME to a suitable level, referring to the frequency response by VOLUME setting on the right.**
- 4 Listen to some music and set PHASE to "NOM" or "REV", whichever makes playback normal.**

## NOTE:

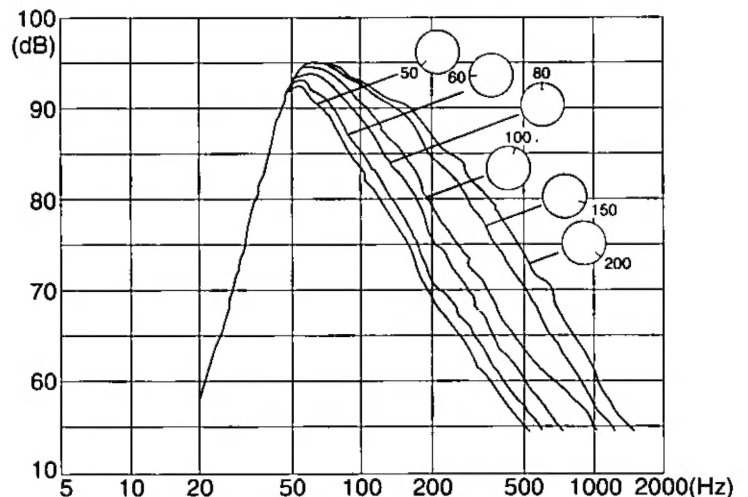
If active subwoofer and speaker phase are the inverse of one another, they will tend to rub each other out. Playback will not be normal and sounds will seem muffled.

## About the POWER indicator

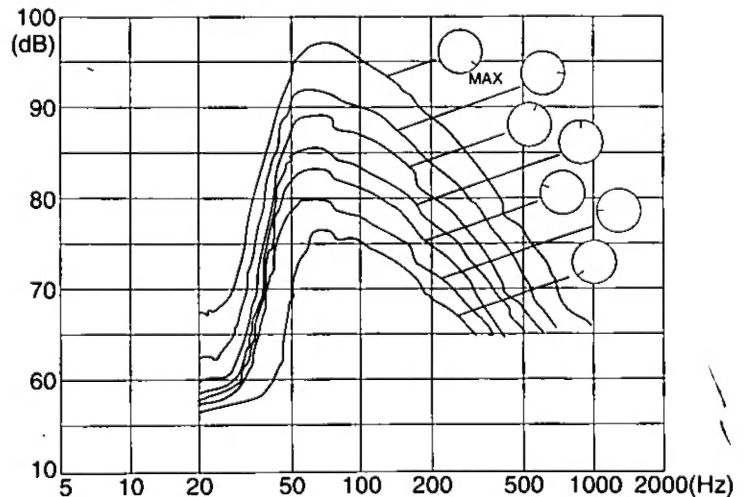
This unit will automatically go on standby (indicator turns red), if no signal is sent within (approximately) 10 minutes from the moment you turn ON the power.

Once the signal is received, this unit starts working normally (indicator turns green).

Frequency response by LOW PASS FILTER setting



Frequency response by VOLUME setting



# Protection circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlined below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again.

#### Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

## Notes

1. Be sure to reduce the volume level setting at the receiver when the signal input exceeds the rated allowable input in order to avoid damage to circuitry or other malfunctions.
2. Avoid locations such as described below.
  - In direct sunlight
  - Near heating appliances or other sources of heat
  - Where the humidity is high
3. Never use alcohol, paint thinner, benzine or similar chemicals to clean the unit as they may damage the finish.
4. Do not touch the diaphragms, to do so may cause distortion.

(In U.S.A. consult MSC Authorized Servicers for detailed instructions or call 1-800-545-2672 for the address of an authorized factory servicer.)

# Technical Specifications

**TYPE** Subwoofer system with built-in amplifier

## ■ AMPLIFIER SECTION

20 Hz – 200 Hz continuous power output (THD 1%)	50 W (4 $\Omega$ )
Phase switching	NORMAL, REVERSE
Input sensitivity/impedance	
RCA-type pin-plug jack	54 mV/10 k $\Omega$
Push-type terminals	1.1 V/4.7 k $\Omega$
Power consumption	60 W
Power supply	AC 120 V, 60 Hz

## ■ SPEAKER SECTION

Type	1 way 1 speaker system Bass-reflex type
Speakers	Woofer: 17 cm (6-11/16") cone type
Impedance	4 $\Omega$
Frequency range	32 Hz – 350 Hz (–16 dB) 38 Hz – 250 Hz (–10 dB)

## ■ GENERAL

Dimensions (W × H × D)	384 × 284 × 294 mm (15- <sup>1</sup> / <sub>8</sub> " × 11- <sup>3</sup> / <sub>16</sub> " × 11- <sup>9</sup> / <sub>16</sub> " )
Weight	8.5 kg (18.7 lb)

#### Note:

Specifications are subject to change without notice.  
Weight and dimensions are approximate.

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